Adaptive Dialogue Systems - Interaction with Inte Panasonic

The project aims at exploring natural human-computer interaction and developing dialogue models which will allow users to interact with the computer in a natural and robust way. The need for flexible interaction is apparent not only in everyday computer use, but also in various situations and services where interactive systems can diminish routine work on the part of the service provider, and cater for the users with fast and tailored access to digital information. This also implies that the special needs of disabled people will be taken into account when designing more natural interactive systems for access to information. The innovative goal is to enable natural language interaction in a wider range of situations than has been possible so far, and in situations where its use has not been functional or robust enough. Within the demonstration system, such scenarios include e.g. an intelligent bus-stop which allows spoken and text interaction concerning city transportation. Various application types such as intelligent question-answer systems, automatic call-centers, and other services that would benefit from flexible natural interaction will be investigated within the project.

The explosion of available information also requires that the systems should be able to deal with the problem of knowledge acquisition, and in this respect systems that can learn are of great interest. The capacity of computers has also increased, enabling rapid testing and comparison of various machine learning techniques. The project uses various soft-computing and learning techniques to automate and build a learning system that will also learn from its interaction with the user.